IN THE CLAIMS:

Please write the claims to read as follows:

1. (Currently Amended) A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising:

receiving a write operation, the write operation identifying a file for the write operation;

determining that a volume storing the file has buffer leakage detection activated;

creating a data buffer associated with the write operation; and

in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number, the magic numbers to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

2. (Previously Presented) The method of claim 1 wherein the step of creating the data buffer further comprises:

creating the buffer check control structure and the raw data buffer.

3. (Previously Presented) The method of claim 2 wherein the buffer check control structure comprises a pointer to the raw data buffer.

4. (Previously Presented) The method of claim 1 wherein the step of writing the buffer check control structure to the raw data buffer further comprises:

creating the buffer check control structure; and

4 overwriting a portion of the raw data buffer with the buffer check control structure.

1 5. (Previously Presented) The method of claim 1 wherein the step of writing the buffer check

2 control structure to the raw data buffer further comprises:

3 creating the buffer check control structure; and

4 associating the buffer check control structure to the raw data buffer in a contiguous

5 block of memory.

1 6. (Previously Presented) The method of claim 1 wherein the magic numbers uniquely

2 identify a particular buffer check control structure.

1 7. (Previously Presented) The method of claim 1 wherein the one or more magic numbers

2 comprises a 64-bit number.

1 8. (Previously Presented) The method of claim1 wherein the one or more magic numbers

2 comprises two 32-bit numbers.

1 9. (Previously Presented) The method of claim 1 wherein the consistency point number

2 identifies a current consistency point.

1 10. (Previously Presented) The method of claim 1 wherein the consistency point number

2 comprises a 32-bit number.

1 11. (Currently Amended) A method for detecting leaked buffer writes between a first

2 consistency point and a second consistency point, comprising:

3 selecting a data buffer;

4 determining if the selected data buffer includes a buffer check control structure;

5 determining, in response to the selected data buffer including a buffer check control

6 structure, if a consistency point number within the buffer check control structure is correct;

7 determining if one or more uniquely identifying numbers (hereinafter magic numbers)

8 are within the data buffer check control structure, the magic numbers to uniquely identify the

9 raw data buffer as a labeled buffer check control structure and to indicate that the data

10 structure needs to be checked for leakage; and

11 performing, in response to determining that the consistency point number and the one

12 or more magic numbers within the buffer check control structure are correct, a write

13 operation of a file system buffer.

1 12. (Cancelled)

1 13. (Previously Presented) The method of claim 11 wherein the one or more magic numbers

2 comprise a 64-bit magic number.

1 14. (Previously Presented) The method of claim 11 wherein the one or more magic numbers

2 further comprises two 32-bit magic numbers.

1 15. (Previously Presented) The method of claim 11 wherein the step of determining if the

2 consistency point number is correct further comprises:

3 determining if the consistency point number within the buffer check control structure

4 equals a consistency point number identifying a current consistency point.

1 16. (Previously Presented) The method of claim 11 wherein the step of performing a write

2 operation further comprises:

3 writing a set of raw data within the data buffer to a disk.

17. (Original) The method of claim 16 wherein the raw data comprises the buffer check control structure.

18. (Previously Presented) The method of claim 16 wherein the step of performing the write operation further comprises:

removing the buffer check control structure from the raw data before writing the file system buffer to disk.

19. (Previously Presented) The method of claim 16 wherein the step of performing the write operation comprises:

writing only the raw data within the file system buffer to disk.

20. (Currently Amended) A system for detecting leaked buffer writes between a first consistency point and a second consistency point, the system comprising:

means for receiving a write operation, wherein the write operation identifies a file for the write operation to be performed on;

determining that a volume storing the file has buffer leakage detection activated;

means for creating a data buffer associated with the write operation; and

in response to determining the volume has buffer leakage detection activated, means for writing a buffer check control structure to a raw data buffer associated with the data buffer, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number, the magic numbers to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

21. (Currently Amended) A computer readable media, comprising:

the computer readable media containing instructions for execution on a processor for the practice of a method of detecting leaked buffer writes between a first consistency point and a second consistency point, the method having the steps of,

receiving a write operation directed to a file, wherein the write operation identifies a file for the write operation to be performed on;

determining that a volume storing the file has buffer leakage detection activated;

creating a data buffer associated with the write operation; and

in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number, the magic numbers to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

22. (Currently Amended) An apparatus configured to detect leaked buffer writes between a first consistency point and a second consistency point, the apparatus comprising:

a storage system to receive a write operation, wherein the write operation identifies a file for the write operation to be performed on;

a storage operating system to determine that a volume storing the file has buffer leakage detection activated;

a data buffer created to associate with the write operation; and

a buffer check control structure to write to a raw data buffer associated with the data buffer, in response to the storage operating system determining the volume has buffer leakage detection activated, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number wherein the magic numbers and the consistency point number detect if the write operation leaked between a first consistency point and a second consistency point, the magic numbers

14 to uniquely identify the raw data buffer as a labeled buffer check control structure and to

15 indicate that the data structure needs to be checked for leakage.

1 23. (Previously Presented) The apparatus of claim 22 wherein the data buffer created to

2 associate with the write operations comprises the buffer check control structure and the raw

3 data buffer.

1 24. (Previously Presented) The apparatus of claim 23 wherein the buffer check control

2 structure comprises a pointer to the raw data buffer.

1 25. (Previously Presented) The apparatus of claim 22 wherein the buffer check control

2 structure to write to a raw data buffer associated with the data buffer further comprises the

3 buffer check control structure to overwrite a portion of the raw data buffer.

1 26. (Previously Presented) The apparatus of claim 22 wherein the buffer check control

2 structure to write to the raw data buffer further comprises the buffer check control structure

3 to associate with the raw data buffer in a contiguous block of memory.

1 27. (Cancelled)

1 28. (Previously Presented) The apparatus of claim 22 wherein the one or more magic

2 numbers comprises a 64-bit number.

1 29. (Previously Presented) The apparatus of claim 22 wherein the one or more magic

2 numbers comprises two 32-bit numbers.

30. (Previously Presented) The apparatus of claim 22 wherein the consistency point number is configured to identify a current consistency point.

31. (Previously Presented) The system of claim 22 wherein the consistency point number comprises a 32-bit number.

32. (Previously Presented) A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising:

receiving a write operation, wherein the write operation identifies a data container for the write operation to be performed on;

determining that a volume storing the data container has buffer leakage detection activated;

creating a data buffer associated with the write operation; and

in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer, wherein the buffer check control structure has one or more values to uniquely identify the buffer check structure and a value identifying the first consistency point, the values to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

33. (Previously Presented) The method of claim 32, wherein the data container is a virtual disk or a file.

34. (Previously Presented) The method of claim 32, wherein the first consistency point is the current consistency point.

35. (Previously Presented) The method of claim 32, wherein the step of creating the data buffer further comprises:

creating the buffer check control structure and the raw data buffer.

36. (Previously Presented) The method of claim 32, wherein the step of writing the buffer check control structure to the raw data buffer further comprises:

creating the buffer check control structure; and

overwriting a portion of the raw data buffer with the buffer check control structure.

37. (Previously Presented) The method of claim 32, wherein the step of writing the buffer check control structure to the raw data buffer further comprises:

creating the buffer check control structure; and

associating the buffer check control structure to the raw data buffer in a contiguous block of memory.

38. (Currently Amended) A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising:

receiving a write operation, the write operation identifying a file for the write operation;

creating a data buffer associated with the write operation; and

writing a buffer check control structure to a raw data buffer associated with the data buffer, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number, ~~wherein the one or more magic numbers and the consistency point number uniquely identify the write operation in order to detect leakage between a first consistency point and a second consistency point~~ the magic numbers to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

39. (Previously Presented) The method of claim 38 further comprising:

creating the buffer check control structure and the raw data buffer.

40. (Previously Presented) The method of claim 39 further comprising:

writing a pointer to the raw data buffer into the buffer check control structure.

41. (Previously Presented) The method of claim 38 further comprising:

creating the buffer check control structure; and

overwriting a portion of the raw data buffer with the buffer check control structure.

42. (Previously Presented) The method of claim 38 further comprising:

creating the buffer check control structure; and

associating the buffer check control structure to the raw data buffer in a contiguous block of memory.

43. (Previously Presented) The method of claim 38 further comprising:

uniquely identifying a particular buffer check control structure by the magic numbers.

44. (Previously Presented) The method of claim38 further comprising:

using a 64-bit number as the one or more magic numbers.

45. (Previously Presented) The method of claim 38 further comprising:

using two 32-bit numbers as the one or more magic numbers.

46. (Previously Presented) The method of claim 38 further comprising:

identifying a current consistency point by the consistency point number.

47. (Previously Presented) The method of claim 38 further comprising:

using a 32-bit number as the consistency point number.

48. (Currently Amended) A computer readable media, comprising:

said computer readable media containing instructions for execution on a processor for a method of detecting leaked buffer writes between a first consistency point and a second consistency point, the method having,

receiving a write operation, the write operation identifying a file for the write operation;

creating a data buffer associated with the write operation; and

writing a buffer check control structure to a raw data buffer associated with the data buffer, the buffer check control structure including one or more uniquely identifying numbers referred to as magic numbers and a consistency point number, ~~wherein the one or more magic numbers and the consistency point number uniquely identify the write operation in order to detect leakage between a first consistency point and a second consistency point~~ the magic numbers to uniquely identify the raw data buffer as a labeled buffer check control structure and to indicate that the data structure needs to be checked for leakage.

Please add the follow new claim 49:

49 (New) The method of claim 11, further comprising: detecting buffer leakage in response to determining that the one or more magic numbers within the buffer check control structure are correct and that the consistency point number is not correct.